## Amendments to the Specification:

Please replace the title with the following:

A System for the Tracking and Motion Control of a Professional Video Camera Permitting
the Combination of both Real and Virtual Images A PROCESS FOR THE TRANSMISSION
OF DATA REPRESENTING THE POSITION IN SPACE OF A VIDEO CAMERA AND A
SYSTEM FOR THE IMPLEMENTATION OF THE PROCESS

Please add the following title at page 2, line 1:

## **SPECIFICATION**

Please replace the paragraph at page 2, line 2, with the following:

The invention concerns A system for the transmission of data describing the position in space of a video camera in motion; specifically it is a system for transmitting its spatial coordinates, in real time.

Please replace the paragraph at page 2, line 22, with the following:

- First field of application: the characterization of images within a video stream with respect to the position in space of their focal planes;
- Second field of application: the determination, in real time, of the field of view of a video camera moving within a virtual decor.

Please add the following paragraph at page 3, after line 16:

A previously issued patent by the same inventor, patent No.: US 7187401, entitled "SYSTEM AND A METHOD OF THREE-DIMENTIONAL MODELING AND RESTITUTION OF AN OBJECT" also makes reference to a system for the transmission of data describing the position in space of a video camera in motion by using an inertial control unit. However, the presently described device is different in several ways:

- the primary function of the previously patented process is to provide a three dimensional model of an object, whereas the main function of the system described in the present application is to enable permit the facile imbedding of virtual images onto real images, for use within a film, while using a light and highly mobile (shoulder-held) camera.

- the system previously patented is integrated into camera specially designed for that purpose, whereas the present system is attached to a previously existing camera, usually a professional video camera.
- the methods of data analysis are quite different. The previously patented device processes the data using a free-standing computer containing photogrammetric software in order to obtain a three dimensional model of the scene. On the other hand, in the present device, data analysis is performed utilizing software often referred to as "compositing programs" which enables the imbedding of images from other sources (other films, models, virtual images, etc.) onto images filmed with a camera in motion.

Please replace the paragraph at page 3, line 17, with the following:

At the present state of the art, there exist a certain number of processes and systems which are intended to respond to needs of this type, processes and systems which may be divided into two principal categories.